Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use picture in Genetics book.

Mitosis

Homologous chromosomes don’t pair up together (all 46 separate)

Sister chromatids separate so each new cell has one copy of every chromosome = 46

Meiosis

Homologous chromosomes pair up and cross over. Now each chromatid is unique.

Homologous chromosomes separate

Sister chromatids separate. (Only have one copy of each homologous chromosome.

**Mitosis Meiosis**

|  |  |  |  |
| --- | --- | --- | --- |
| G1 |  | G1 |  |
| S/G2 |  | S/G2 |  |
| P |  | PI |  |
| M |  | MI |  |
| A |  | AI |  |
| T |  | TI |  |
| C |  | C |  |
|  | | PII |  |
| MII |  |
| AII |  |
| TII |  |
| C |  |
|  |  |

G1

S/G2